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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/663,012

09/15/2003

Li-Yuan Wang

1734

25859

7590

06/30/2005

WEI TE CHUNG
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SANTA CLARA, CA 95050

EXAMINER

EDWARDS, ANTHONY Q

ART UNIT

PAPER NUMBER

2835

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|---------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/663,012 | Applicant(s) WANG ET AL. | |
| | Examiner Anthony Q. Edwards | Art Unit 2835 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-13 and 15-19 is/are rejected.
- 7) ☒ Claim(s) 5-7, 14 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10, 11, 13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,510,955 to Taesang. Referring to claim 10, Taesang discloses a storage device mounting apparatus (see Fig. 5) comprising a storage device (1), a bracket (3) accommodating the device therein, the bracket comprising a rail (31) and a guideway (i.e., area along the rail(s)), a first slider (21) attached to one side of the storage device and sliding on the guideway (i.e., upper rail in Fig. 6), a second slider (21) attached to the opposite side of the storage device and sliding under the rail (i.e., lower portion of 21 slides under upper rail 31, see Fig. 6), and securing means (6) fixedly securing the storage device (1) in the bracket (3).

Referring to claim 11, Taesang discloses a storage device mounting assembly as claimed, wherein the bracket (3) comprising a front plate (i.e., U-shaped front) and a bottom plate (i.e., lower portion of rails 31), and the front plate defines an opening (not numbered) for access of the storage device therethrough. See Figs. 5 and 6.

Referring to claim 13, Taesang discloses a storage device mounting assembly as claimed, wherein the second slider (21) forms a horizontal strip (2) sliding along the rail (31) of the bracket, and a vertical strip (not numbered) attached to the opposite side of the storage device.

Referring to claim 15, Taesang discloses a storage device mounting assembly as claimed, wherein the first slider (21) forms a horizontal strip (2) sliding along the guideway, a vertical strip (not numbered) attached to the one side of the storage device, and the horizontal strip defining a through hole (to receive screw S1) therein. See Figs. 5 and 6.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 8, 9, 12 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taesang in view of U.S. Patent Application Publication No. US2002/0172014 to Lung. Referring to claim 1, Taesang discloses a storage device mounting apparatus for mounting a storage device (1) therein, as substantially claimed. Taesang does not teach providing a stop means for preventing over-insertion of the storage device into the bracket.

Lung teaches providing a slider (40), attached to a storage device (30), sliding along a guideway (i.e., the inner portion of the U-shaped bracket), and having stop means (22) for preventing over-insertion of the storage device into the bracket. See Figs. 1 and 2 and the corresponding specification. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Taesang to include a stop means, as taught by Lung, since the stop means of Lung would provide precise location of the storage device through the front of the bracket.

Referring to claim 2, Taesang in view of Lung disclose a storage device mounting apparatus, wherein the stop means (22) comprises an aperture defined in the guideway.

Likewise, it would have also been obvious to one of ordinary skill in the art at the time of the invention to further modify the apparatus of Taesang to include catch (54) formed on the first slider (21), as taught by Lung, the catch engaging in the aperture. See Figs. 1 and 2 of Lung.

Referring to claim 3, Taesang in view of Lung disclose a storage device mounting apparatus, wherein the bracket (3) comprises a front plate (i.e., U-shaped front) and a bottom plate (i.e., lower portion of rails 31), and the front plate defines an opening (not numbered) for access of the storage device therethrough. See Figs. 5 and 6 of Taesang.

Referring to claim 4, Taesang in view of Lung disclose a storage device mounting apparatus, wherein the guideway extends upwardly from the bottom plate (i.e., rails 31) of the bracket. See Figs. 5 and 6 of Taesang.

Referring to claim 8, Taesang in view of Lung disclose a storage device mounting apparatus, wherein the first slider (21) forms a horizontal strip (2) sliding along the guideway, and a vertical strip (not numbered) defining a pair fixing holes (to receive screw S1) therein. See Fig. 5 of Taesang.

Referring to claim 9, Taesang in view of Lung disclose a storage mounting apparatus, wherein the first slider (21) defines a through hole (i.e., hole in horizontal strip) therein, the guideway defines a securing hole (not numbered), and the securing means comprises a screw (6) extending through the through hole of the first slider to engage in the securing hole of the guideway. See Figs. 5 and 6 of Taesang. Although a thumbscrew is not disclosed, it is notoriously old and well-known in the art of modularized storage device mounting structures to

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utilize thumbscrews as a manner of securing the devices to a bracket within a computer chassis. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the apparatus of Taesang to include a thumbscrew as the securing means for the storage device, since the thumbscrew would allow for a lower profile within the bracket and would also eliminate the need for catch (5) of Taesang.

Referring to claim 12, Taesang discloses a storage device mounting apparatus according to claim 10, except for a stop formed on the bracket and a cutout for engagingly receiving the stop. Lung teaches providing a stop (22) formed on a bracket in general alignment with a rail (16), and a cutout (54) defined in an end of the second slider for engagingly receiving the stop (see Figs. 1 and 2 of Lung). As mentioned above, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Taesang to include a stop means on the bracket and a corresponding cutout on the slider to provide precise location of the storage device through the front of the bracket.

Referring to claim 17, Taesang in view of Lung disclose a storage device mounting apparatus, wherein the guideway (i.e., area along the rail(s)), defines an aperture (22) therein (see Figs. 1 of Lung) and a catch (54) is formed on the first slider (see Fig. 2 of Lung), the catch engaging in the aperture for preventing over-insertion of the storage device into the bracket.

Claims 16, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taesang in view of U.S. Patent No. 6,646,870 to Shih. Referring to claim 16, Taesang discloses a storage device mounting apparatus according to claims 10 and 15, including the guideway defining a securing hole (not numbered) therein and the securing means (6) extending through

the through hole of the first slider to engage in the securing means of the guideway. See Figs. 5 and 6. Taesang does not teach the securing means comprising a thumbscrew.

Shih teaches providing a thumbscrew (3) as a means for securing a storage device (7) onto a bracket (2). See Figs. 2-4. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Taesang to include a thumbscrew as the securing means for the storage device, as taught by Shih, since the thumbscrew would allow for a lower profile within the bracket and would also eliminate the need for catch (5) of Taesang.

Referring to claim 18, Taesang discloses a storage device assembly comprising a bracket (3), a guideway (i.e., area along the rail(s)), formed on the bracket, a storage device (1), and a slider (21) attached to a side of the storage device, wherein said slider associated with the storage device moves along said guideway in a front-to-back direction, and defines a screw hole (on the horizontal portion 2 of the slider) through which a screw (6) extends and is fastened to the guideway under a condition that said screw is vertically exposed to an exterior for accessible operation. See Fig. 5 and the corresponding specification. Taesang does not teach providing a cutout defined around a corner of the storage device, such that the screw is vertically exposed to the exterior via the cutout.

Shih discloses a modularized component mounting structure for mounting storage devices, including both floppy disks (see Figs. 3 and 4) and optical disks (see Figs. 5 and 6), wherein the optical disk (7) include a cutout defined around a corner of the storage device, such that a screw (3) is vertically exposed to the exterior via the cutout (see Fig. 6). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the storage device assembly of Taesang to include a cutout defined around a corner of the storage

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device, as taught by Shih, since the device of Shih would allow for the engagement and removal of a both floppy drives and optical drives from the assembly of Taesang in an efficient and effective manner.

Referring to claim 19, Taesang in view of Shih disclose a storage device assembly, wherein said bracket (3) includes a front plate with an opening therein, said guideway is essentially aligned with an side edge portion of the opening in said front-to-back direction so that said storage device (1) is inserted into the opening along said front-to-back direction and defines a transverse dimension similar to a lengthwise dimension of the opening. See Fig. 5 of Taesang.

Allowable Subject Matter

Claims 5-7, 14 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: referring to claim 5, it would not have been obvious to a person of ordinary skill in the art to (1) include on the bottom plate a rail parallel to the guideway, and (2) provide the guideway and the rail corresponding to opposite sides of the opening respectively. These features, in combination with the rest of the elements or steps, are not taught or suggested by the prior art references. Claims 6 and 7 depend, either directly or indirectly, from claim 5 and are therefore allowable for at least the reasons provided above.

Likewise, referring to claim 14, it would not have been obvious to a person of ordinary skill in the art to (1) provide the bottom plate with a guideway opposite to the rail, and (2)

include the guideway slidably supporting the first slider. These features, in combination with the rest of the elements or steps, are not taught or suggested by the prior art references.

Referring to claim 20, the specific limitation of the stop means being formed between the first slider and the guideway is not taught or suggested by the prior art references, and it would not have been obvious provide the same.

Response to Arguments

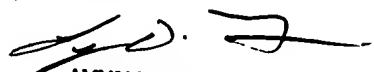
Applicant's arguments with respect to claims 1, 10 and 18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Q. Edwards whose telephone number is 571-272-2042. The examiner can normally be reached on M-F (7:30-3:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D. Feild can be reached on 571-272-2800, ext. 35. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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